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ABSTRACT

The National Assessment of Educational Progress is a project which annually surveys the knowledge, skills, and attitudes of young Americans. Its basic mission is to provide information useful to educational decision-makers and practitioners. The project has contributed to American education, but its assessment results have been of limited usefulness. To make the project's results more useful, the Secretary of Health, Education, and Welfare should redirect the project by (1) identifying informational and other needs of decision-makers, (2) determining the feasibility and cost effectiveness of alternative approaches to satisfy those needs, and (3) deciding on the assessment approach to be used. (Author)

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REPORT TO THE CONGRESS



BY THE COMPTROLLER GENERAL
OF THE UNITED STATES

ED129897

The National Assessment Of Educational Progress: Its Results Need To Be Made More Useful

National Center for Education Statistics
Department of Health, Education, and Welfare

The National Assessment of Educational Progress is a project which annually surveys the knowledge, skills, and attitudes of young Americans. Its basic mission is to provide information useful to educational decision-makers and practitioners. The project has contributed to American education, but its assessment results have been of limited usefulness.

To make the project's results more useful, the Secretary of Health, Education, and Welfare should redirect the project by (1) identifying informational and other needs of decision-makers, (2) determining the feasibility and cost effectiveness of alternative approaches to satisfy those needs, and (3) deciding on the assessment approach to be used.

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
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HRD-76-110

JULY 20, 1976



COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-164031(1)

To the President of the Senate and the
Speaker of the House of Representatives

The National Assessment of Educational Progress is a project supported through contracts with the National Center for Education Statistics, Department of Health, Education, and Welfare. The project assesses the knowledge, skills, and attitudes of selected age groups of Americans to provide information useful to educational decisionmakers and practitioners.

This report points out that, although the National Assessment has contributed to American education, its assessment results have been of limited usefulness. The report includes recommendations to make the assessment results more useful.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget, and the Secretary of Health, Education, and Welfare.

A handwritten signature in black ink, reading "Thomas B. Smith", is positioned above the printed name of the Comptroller General.

Comptroller General
of the United States

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ABBREVIATIONS

GAO	General Accounting Office
HEW	Department of Health, Education, and Welfare

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

THE NATIONAL ASSESSMENT
OF EDUCATIONAL PROGRESS:
ITS RESULTS NEED TO
BE MADE MORE USEFUL
National Center for Education
Statistics
Department of Health, Educa-
tion, and Welfare

D I G E S T

How much good is the yearly expenditure of billions of dollars on education doing in terms of what Americans know and can do?

The National Assessment of Educational Progress is a project which, annually since 1969, has tried to provide answers to this question through surveys of the knowledge, skills, and attitudes of selected age groups of young Americans. Its basic goal is to provide information useful to educational decisionmakers and practitioners. (See p. 1.)

The project grew from a realization in the early 1960s, when the Federal Government began investing heavily in formal education, that no comprehensive, dependable information existed on the educational attainments of Americans.

National Assessment officials believe that the project's purpose is related to the movement toward accountability in education. This movement emphasizes that the purpose of schools is to provide education and seeks to hold education officials accountable for this. To evaluate education, one needs information about the knowledge and skills of the student population. (See p. 3.)

The National Assessment, located in Denver, has been a project of the Education Commission of the States since 1969. The Commission is a nonprofit organization formed by interstate compact in 1966. (See p. 2.)

The project has received about \$35.5 million in Federal support through fiscal year 1976. It has contributed to American education by advancing educational assessment technology and helping State education agencies to apply assessment technology. However, National Assessment results have been of limited usefulness to education decisionmakers, researchers, and practitioners. This has prevented the project from achieving its basic goal. (See pp. 3, 10, 23, and 25.)

To make the project's results more useful, GAO is recommending that the Secretary of Health, Education, and Welfare redirect the project by

- identifying the informational and other needs of decisionmakers,
- determining the feasibility and cost effectiveness of alternative approaches for collecting and reporting educational assessment data and providing other services to satisfy those needs, and
- deciding on the assessment approach to be used. (See p. 34.)

Although consultation with project officials seems necessary during this process, it is also important to seek the views of users or potential users of project results at national, State, and local levels and of recognized experts in educational management, assessment, and research. (See pp. 34 and 35.)

Examples of possible alternative strategies for the National Assessment include:

- Restricting the project's data collection efforts and primarily providing assessment models, test objectives and questions, and technical assistance concerning assessment to States, local school districts, etc.
- Expanding the project's data collection efforts to provide more information on geographic, demographic, or background variables.

--Focusing data collection efforts on the information needs of one level of government, such as the Federal level, and restructuring subject areas, sample size, and demographic and background variables to serve those needs within a shorter time frame.

--Making more modest changes in the present mixture or manner of providing technical assistance, planned assessment data, and special studies. (See p. 35.)

The Secretary should require project management to increase the use and improve the usefulness of project data by

--Establishing continuous dialogues with the Congress, executive agencies, and State and local policymakers to determine their data needs and how the National Assessment can best meet those needs.

--Continuing and increasing recent efforts to interpret project data so as to rely less on others for data interpretation.

--Providing for comparison of its test results with performance standards by giving greater emphasis to developing the procedures needed to compare those results to generally acceptable non-Federal standards.

--Improving its communication and cooperation with the National Institute of Education and other educational researchers to facilitate possible research, interpretation, and applications of project results.

--Improving dissemination of project results. (See p. 35.)

GAO is also recommending that the Secretary urge project management to better use the project's capabilities by

--Continuing to develop and refine objective-referenced tests--which give results for a group in terms of predetermined educational objectives.

- Increasing its technical assistance to local education agencies regarding its concepts, materials, and methods when possible within the available funding.
- Improving its services to Federal agencies and others by providing special studies for those who need and are willing to finance them. Accordingly, the project should better inform potential users of its capabilities. (See p. 21.)

The Department of Health, Education, and Welfare stated that it is reexamining the project to decide on the necessity, nature, or extent of any redirection. It does not believe redirection is warranted until the reexamination has been completed.

Regarding GAO's recommendation that the Department require the project to give greater emphasis to developing the procedures needed to compare its test results to generally acceptable standards, the Department stated that it will (1) explore the standards problem with the project's staff and (2) encourage efforts to provide the technical and methodological guidance needed for policymakers at various levels to make their own comparisons or judgments concerning appropriate standards. The project went beyond this and agreed to provide for comparison of its test results with performance standards. (See p. 36.)

Lack of performance standards is an important factor limiting the usefulness of the project's data. However, the project's commitment to provide for comparison with standards is a good first step toward solving the problem. (See p. 36.)

The Department agreed with GAO's other recommendations, and the National Assessment agreed with all of GAO's recommendations. Both the Department and the National Assessment described actions taken or planned to implement the recommendations. (See pp. 21, 22, 36, and 37.)

CHAPTER 1

INTRODUCTION

The National Assessment of Educational Progress is a project which annually surveys the knowledge, skills, and attitudes of selected age groups of young Americans. The project, which began as an exploratory committee in 1964, made its first assessments in 1969.

The National Assessment seeks to help answer this question: How much good is the yearly expenditure of billions of dollars on education doing in terms of what Americans know and can do? Its basic goal, as stated in its 5-year plan, is "to provide information useful to educational decisionmakers and practitioners in identifying problems, setting priorities, and determining progress." This is to be accomplished by achieving the following eight goals:

- Measuring changes in knowledge and skills of young Americans over time.
- Acquiring data on educational attainments.
- Improving the technology needed for gathering and analyzing National Assessment achievement data.
- Facilitating the use of National Assessment technology at the State and local levels.
- Making special studies of selected areas of educational attainment.
- Promoting interpretations of National Assessment data.
- Disseminating findings.
- Conducting appropriate research.

The National Assessment's report on its goals and accomplishments from 1969 through 1975 indicates that the collection of concrete information--such as comprehensive data on educational attainments and the measurement of changes in these attainments--should, over time, assist national educational policymakers in decisionmaking. According to its 5-year plan, the project also seeks to provide information to State and local educational decisionmakers, curriculum developers, and researchers.

A National Assessment information booklet states that the project's reports should provide many ideas for local and State assessment projects, curriculum design, instructional materials development, and teacher education.

The National Assessment, located in Denver, has been a project of the Education Commission of the States since 1969. The Commission is a nonprofit organization formed by interstate compact in 1966. Forty-five States, Puerto Rico, and the Virgin Islands are members. Their representatives include Governors, chief State school officers, and legislators. The Commission's purpose is to discuss mutual educational problems and act together to achieve common goals.

The National Assessment operates under annual contracts with the National Center for Education Statistics in the Office of the Assistant Secretary for Education, Department of Health, Education, and Welfare (HEW). Before fiscal year 1975, HEW's Office of Education awarded annual contracts to the National Assessment. The current contract supports the National Assessment goals and specifies the tasks to be performed for achieving those goals. The National Center for Education Statistics

- reviews the contract proposal and subcontracts;
- coordinates the award of the contract with HEW contracting specialists; and
- broadly monitors the contract through such means as providing policy guidance to the project, participating in the deliberations of various project policy and advisory committees, and reviewing materials being developed for publication.

NEED FOR THE NATIONAL ASSESSMENT

During the past decade, the National Assessment developed from an idea shared by a small group of distinguished scholars and outstanding educational practitioners to an ongoing operational project. It has about 80 staff members, utilizes major subcontractors, and tests thousands of individuals each year.

The project grew from a realization in the early 1960s, when the Federal Government began investing billions of dollars annually in formal education, that no comprehensive and dependable information existed about the educational attainments of Americans. The only available measures of educational quality were based on such information as the number of classrooms, teacher-student ratios, and dollars spent per

student. No significant direct assessment had been made of educational outcomes--what students do or do not know and can or cannot do. Although State- or school-administered standardized tests, which provided scores to compare students, were useful for categorizing students, they were not designed to provide information about what students were actually learning.

National Assessment officials believe that the project's purpose is related to the current movement toward accountability in education. Educational accountability emphasizes that the purpose of schools is to provide education, and it seeks to hold education officials accountable for educating children. To evaluate children's education, one needs information about the knowledge and skills of the student population.

The idea of a National Assessment encountered considerable early resistance, principally among the States, because the project was perceived as a nationwide testing program providing comparative data on a State-by-State basis. These concerns are reflected in the fact that the National Assessment reports data only on national and regional bases to provide more neutral and general data.

FUNDING

The project, including preliminary committees established to explore its feasibility and plan its approach, has been supported by both private and public funds since 1964. Through fiscal year 1970, private foundations provided nearly \$4.5 million to support its development. Federal support through the Office of Education and the National Center for Education Statistics has amounted to about \$35.5 million through fiscal year 1976. Funding by year and source is shown on the following page.

<u>Source</u>	<u>Fiscal years (note a)</u>	<u>Funding</u>
Carnegie Corporation	1964-1970	\$ 2,782,900
Ford Foundation	<u>b/</u> 1966-1969	1,696,000
Office of Education	1968-1976	<u>c/</u> 26,124,394
National Center for Education Statistics	1975-1976	<u>d/</u> 9,400,000
		\$40,003,294
		<u>e/</u> 100,000
Total		<u>\$40,103,294</u>

a/The National Assessment's fiscal year is October 1 through September 30.

b/No Ford Foundation funding was provided for fiscal year 1968.

c/Includes \$352,036 from the Right to Read program for assessing functional literacy in fiscal years 1974-76. No other Office of Education funds were provided for fiscal years 1975 and 1976.

d/Includes fiscal year 1976 funding of \$4.9 million.

e/National Assessment funds derived from Office of Education grants to the University of Minnesota in 1966 and 1967.

SCOPE OF REVIEW

Because of the Federal investment in the National Assessment, we were concerned with the project's usefulness and how it might be improved.

To obtain State and local education agency views on the usefulness of the National Assessment and on related matters, we sent questionnaires to education agencies in all States and the District of Columbia and to a stratified statistical sample of local school districts throughout the Nation. The questionnaires were sent in April 1975 and were returned by June 1975.

The District of Columbia and all but one State responded to our State-level questionnaire. To simplify reporting of questionnaire results in this report, we consider the District of Columbia to be a State. State-level respondents

were nearly always officials responsible for statewide assessment, accountability, and/or testing activities. (See app. I for the compilation of responses on the State education agency questionnaire.)

Our questionnaire sample for local school districts was largely the same as a national sample used by the Office of Education in 1973. Neither sample included any school districts having fewer than 300 pupils. Both were stratified according to enrollment as follows:

125,000	pupils or more
35,000	to 124,999 pupils
9,000	to 34,999 pupils
3,000	to 8,999 pupils
300	to 2,999 pupils

Nineteen school districts compose the first group--the largest school districts--and all were included in the sample. An independent random sample of 813 school districts was drawn from the remaining groups. We received responses from 710 (85 percent) of the 832 school districts included in the sample.

As a result of the high response rate, the attitudes and opinions expressed in response to our local questionnaire are representative of the universe of 11,666 local school districts--all those in the Nation having 300 or more pupils. However, we projected a total of 8,941 local education agencies responding because, based on the weighting and the response rates across the various strata in our sample, this method allows us to obtain the most accurate percentage breakdowns on the answers given.

Most local respondents were directors of testing, but some superintendents responded. (For local education agency questionnaire results, see app. II. The numbers shown there represent the number of local school districts in the Nation to which our local questionnaire sample responses have been projected.)

To supplement information obtained from the questionnaire, we interviewed officials of 5 State departments of education, the District of Columbia, and 10 local school districts.

We reviewed policies and procedures and various reports prepared by and/or relating to the National Assessment. We interviewed officials of the National Assessment, the Education Commission of the States, the Office of the Secretary of HEW, the Office of the Assistant Secretary for Education, the

National Center for Education Statistics, the Office of Education, the National Institute of Education, and the Office of Management and Budget. In addition, we interviewed the staff of various congressional committees and officials of 11 education research organizations, including 4 commercial test publishers, and 6 research/evaluation organizations. We also interviewed officials of two national interest groups concerned with education.

CHAPTER 2

PROJECT INITIATION AND ADMINISTRATION

During the early 1960s, the Commissioner of Education became concerned about the lack of comprehensive and comparable data on educational attainments. In 1963 he initiated a series of conferences to explore ways to provide this information. The original 1867 Office of Education charter (14 Stat. 434) provided the authority for the Commissioner to determine the Nation's progress in education.

PLANNING THE NATIONAL ASSESSMENT

Project planning began in 1964 with establishment of an exploratory committee to examine the possibilities of a national assessment. Four years of work financed by the Carnegie Corporation and the Ford Foundation went into determining how a national assessment could be designed, defining goals, developing measuring instruments, and developing a plan for conducting the assessment. This work was done in consultation with leading educators, subject matter specialists, and interested laymen.

The committee decided it was feasible to initiate a project to periodically assess the knowledge, understanding, skills, and attitudes in 10 learning areas (art, career and occupational development, citizenship, literature, mathematics, music, reading, science, social studies, and writing) at four age levels (9, 13, 17, and young adults aged 26-35). By 1969 a complete methodology and approach to collecting data had been designed, and the first assessment had begun in the areas of science, citizenship, and writing.

These learning areas were selected because the National Assessment, together with its advisors and consultants, believed in focusing on traditional subject matter areas rather than measuring skills and attitudes which go beyond these areas. Project officials perceived that national data on attainments in subject areas at different age levels and the changes in attainments over time could be of great interest to policymakers at national, State, and local levels.

The age levels were selected to represent educational milestones that most students attain: age 9, when most students have been exposed to the basic program of primary education; age 13, when most students have completed their elementary level education; and age 17, when most students are still in school and completing their secondary education. To

provide information on all 17-year-olds, the project also sampled those out of school. In addition, young adults were sampled to assess the skills, knowledge, and attitudes of those who had completed their formal education. The samples are designed to enable the project to make inferences about the populations from which the samples are selected.

As a result of recent budgetary restrictions, the project has at least temporarily discontinued the assessment of young adults and has reduced the 10 learning areas to 5: science, mathematics, reading, social studies and citizenship, and humanities (which includes literature, art, and music).

Data in each learning area is collected and reported on an overall national basis and by

- four geographical regions (Northeast, Southeast, Central, and West);
- seven sizes and types of community (extreme rural areas, extreme inner city, inner city fringe, urban fringe, affluent suburb, medium-sized city, and small city);
- four educational levels of parents (no more than eighth grade, more than eighth grade but less than high school graduation, high school graduation, and some formal education beyond high school);
- race (black, white, and other); and
- sex.

To provide information on what the populations sampled are learning, the project designed and developed new test instruments, referred to as objective-referenced tests. Standardized norm-referenced achievement tests compare each student's performance with the average performance of other students. In contrast, the project's results are reported in terms of a percentage of the group tested that was able to perform an exercise or question. The sampling techniques do not require each respondent to answer all questions used in a learning area, and no respondent receives a score. Each question reflects a previously defined educational objective, which has been approved by a review group made up of educators and other citizens.

ADMINISTERING THE NATIONAL ASSESSMENT

National Assessment staff are responsible for

- developing individual test questions,
- monitoring the administration and collection of field data as well as the sampling and scoring,
- analyzing the data,
- disseminating and reporting assessment results, and
- providing technical assistance to States and localities interested in designing their own assessments.

Subcontractors are responsible for drawing the sample, administering the tests, collecting data, and scoring the results.

Much of the project's work is concerned with year-by-year implementation of the overall design, which was developed at the beginning of the project. Two of the original 10 learning areas were scheduled for assessment each year; reassessments were scheduled for about every 5 years. With the project now reduced to five learning areas, one area is scheduled for assessment each year after 1975. Many project activities are repeated for each learning area and for each cycle in accordance with the established design and employ similar procedures and technology. According to National Center for Education Statistics and project officials, measuring changes in educational performance requires such continuity.

A single learning area assessment cycle--from test objectives development or redevelopment to completion of the basic technical reporting of the data--requires about 5 Years:

- 2-1/2 years for test objective and question development,
- 1-1/2 years for the preparation and performance of data collection, and
- 1 year for preliminary analysis and basic reporting.

National Assessment officials told us they are trying to shorten this time frame.

CHAPTER 3

IMPACT OF NATIONAL ASSESSMENT

METHODS, MATERIALS, AND ASSISTANCE

The National Assessment has contributed to American education by advancing educational assessment technology and helping State education agencies to apply assessment technology. The project has demonstrated the capacity to conduct special studies of selected learning areas. It also has provided information on knowledge, skills, and attitudes of selected age groups of Americans in various learning areas assessed nationally and broken down by region, type of community, parental education, race, and sex. (Limitations in the use of this data are discussed in ch. 4.)

The National Assessment could increase its contribution by (1) continuing to develop and refine objective-referenced tests, (2) expanding its assessment technology assistance to local education agencies, and (3) providing its special studies to all Federal agencies and others needing and willing to finance them.

CONTRIBUTIONS TO ASSESSMENT TECHNOLOGY

The National Assessment has contributed to educational assessment technology by developing objective-referenced tests and implementing a model for assessment based on these tests.

Developing objective-referenced tests

The National Assessment, together with its advisors, decided early in its planning stages not to use standardized, norm-referenced achievement tests; instead it developed and used objective-referenced tests designed to measure what groups of people know and can do. While standardized tests might have provided the means to make some interesting local, State, and national comparisons, they were not designed to provide information for determining what children have learned in relation to specific educational goals or objectives.

The following differences between the makeup and use of National Assessment objective-referenced tests and the typical standardized norm-referenced achievement tests were cited in a National Assessment report and in an article by a former project official.

--National Assessment questions measure how well students as a group achieve desirable educational objectives; standardized tests compare each student with the average (norm) performance of other students.

--Various National Assessment questions are geared for the high, average, and low ability students; standardized test questions are aimed at the "average" child.

--National Assessment total scores reflect the number of students who got the correct answer on a particular question, and individuals do not receive scores; total scores on standardized tests reflect the number of correct answers a student gives.

--National Assessment results are reported on a question-by-question basis; standardized test results are reported in relation to a norm group.

--About half of the National Assessment questions used are made public to accompany the results, while the other half are kept confidential to assess performance changes over time; standardized achievement test questions are rarely, if ever, made public.

The National Assessment's method of identifying and selecting learning area objectives or revising those used in a previous assessment and developing questions is complex. Revising or developing objectives takes about 9 to 12 months, and developing questions takes another 18 months. The following steps occur during the development of objectives and questions:

--Two series of conferences of subject matter specialists, educators, and concerned citizens develop or revise objectives.

--Based on the objectives selected, the project proposes specifications for a pool of questions to be developed and supervises the work of teams of experienced subject matter experts who make up the questions.

--The project staff edits the questions, which are tried out on participant samples throughout the country.

--Panels of subject matter specialists and educators review questions accompanied with tryout results and question analysis data and accept, revise, or reject them; the tryout and review processes are repeated for revised questions.

--A panel of laymen review the accepted questions for relevance and for lack of bias and offensiveness.

--Subject matter specialists, educators, and project staff select questions from the pool of approved questions to compose a set of assessment materials for measuring the objectives in a balanced manner.

--A committee of the Education Commission of the States reviews the selected questions.

Most of the educational researchers we interviewed stated that the National Assessment's development of objective-referenced tests has been a significant contribution to assessment technology. They believe that these tests are more useful than standardized tests (1) in assessing whether educational objectives are being met and (2) for use at the local and classroom levels. Officials in several State education agencies we visited also complimented the National Assessment's work in this area.

Thirty-six of the 47 States replying to our questionnaire that have or are planning statewide assessment programs indicated that they used tests based on educational objectives in their programs. Although it is difficult to verify that States' increased use of these tests relates directly to the project, some educators believe that such a direct relationship exists. Our questionnaire results show that 32 States and a projected 104 of the more than 8,900 local education agencies represented by our sample suggested improvement in National Assessment studies. Of these, 15 States and 53 percent of the local agencies see a need for further development of tests based on educational objectives.

Developing a model for objective-referenced assessment

The National Assessment has made a valuable contribution to educational assessment technology by developing and implementing a model for objective-referenced assessment. The model is the National Assessment approach to gathering, analyzing, and reporting data. In addition to developing objective-referenced tests, discussed previously, the major aspects of the model include (1) the sampling plan, (2) test administration, (3) scoring and analysis of test data, and (4) reporting results.

Test publishers, educational researchers and independent evaluators of the project cited National Assessment contributions to assessment technology involving various aspects of the model, including

- improving the art of sampling;
- standardizing test administration;
- improving quality control over data gathering;
- using innovative techniques in statistically analyzing data on changes over time;
- pioneering new technical approaches to question and test development and developing unconventional questions; and
- developing the technical feasibility for addressing questions relevant to policy issues, although not fulfilling this potential. (See ch. 4.)

The National Assessment has facilitated the use or adaptation of the model, or selected aspects of it, by State and local education agencies. For example, one State made an extensive application of the model, carefully duplicating it so that comparable State data was collected in each of National Assessment's subject matter areas. The State accepted the National Assessment's educational objectives as reflecting the State's objectives.

ASSISTANCE TO AND IMPACT ON STATE AND LOCAL EDUCATION AGENCIES

A major goal of the National Assessment project has been to facilitate the use of project methods and materials at the State and local levels. Through technical assistance the project has facilitated the use of its concepts, methods, and materials at the State level. More emphasis, however, needs to be given to assisting local education agencies.

During the past few years, interest in educational assessment at the State and local levels has increased. New laws have been enacted in several States mandating their own statewide assessment evaluation or accountability programs. Several States have modified their laws to require greater reliance on the type of testing used by the National Assessment, that is, testing based on objectives. According to project officials, the National Assessment has felt a direct impact of this growing movement. For example:

- The project provided 32 onsite consultations to States and responded to several hundred requests for technical assistance from State education agency personnel during 1974 and 1975.

- National Assessment staff contacted nearly 90 percent of the State officials responsible for planning and administering State-level assessment programs, through staff visits or at national conferences and other gatherings.
- For 5 years the project has sponsored annual conferences on assessment and State assessment workshops for State and local officials. The nearly 500 attendees have represented 46 States, Puerto Rico, Guam, the Virgin Islands, and Canada.

Assistance to States

Our questionnaire results show that 40 States have a statewide assessment program and 7 others are planning one. Questionnaire data confirms the National Assessment's efforts to work with States. Thirty-one of the State respondents have participated in the project's workshops on assessment and 37 of the 48 States responding to this question have had discussions with colleagues who have attended from the State.

One reason for our questionnaire survey was to obtain views from State education agencies about the use of National Assessment methods and materials for their assessment programs. All 50 State respondents indicated that they were familiar with the National Assessment, but only 37 said they had reviewed National Assessment material sufficiently to determine its utility to their assessment programs. Of those 37 State respondents

- 32 answered yes, 3 answered no, and 2 did not respond when asked if they had used or planned to use the project's concepts, materials, or methods and
- 20 indicated that National Assessment concepts, methods, and materials were highly or very highly useful to their programs, 9 indicated moderate usefulness, 7 indicated limited usefulness, and 1 did not respond.

State use of project concepts, methods, or materials is concentrated in the areas of State assessment planning and evaluation, State assessment comparisons, and the development of educational objectives.

When asked which organizations have provided or are scheduled to provide formal technical assistance for the State assessment program, State respondents cited consultants and the National Assessment most frequently. Twenty-eight of the 46 States responding to this question cited consultants,

and 23 cited the National Assessment. Of those who had received technical assistance from the project, 18 of 22 who answered this question stated that substantial or very great increases are needed in efforts by the educational community to develop alternatives to standardized norm-referenced tests. In total, 37 out of 48 States responding indicated that the educational community needs to substantially or very greatly increase its efforts to develop such alternatives.

The National Assessment gives States and localities the opportunity to "piggyback" on the project. Using this technique a State conducts its statewide assessment on an expanded State sample, using the National Assessment model in whole or in part. In turn, a local school district can choose to piggyback on either the State or the National Assessment by expanding the sample for local testing and using State or National Assessment questions in whole or in part.

Two States are now providing opportunities for local school districts to piggyback on State-level programs, which already piggyback on the National Assessment. This will provide comparisons of school district results on individual questions with national, regional, and State results. These innovations promise relief from the present testing burden being experienced by many schools across the country and should dramatically illustrate how cooperation among national, State, and local agencies can reduce costs and enhance the usefulness of assessment data at all levels.

In addition to the States which have adopted procedures and materials sufficiently to make direct "State to National Assessment comparisons," at least 22 States were using the project's questions for only "within-State" comparisons. As of the 1973-74 school year, 11 States had drawn questions from the National Assessment and incorporated them into their State testing programs. During the 1974-75 school year, an additional 11 States adopted or adapted National Assessment materials for their assessment programs.

Two examples of State use of assessment results developed through National Assessment assistance follow.

- One State used its assessment findings to document educational needs and support a request for Federal funds for two special educational programs. Its assessment was based on National Assessment objectives and questions.

--Another State, after its first statewide assessment in reading, was able to compare its statewide results with regional and national levels of performance provided by the National Assessment. This information was used to plan for more effective use of State education resources. One outcome of that evaluation and planning was a new emphasis on urban reading programs.

To help States develop greater expertise, the National Assessment has also helped six States to form a new organization--the National Council for the Advancement of Educational Assessment--which will explore mutual assessment problems.

Assistance to local school districts

Based on the local education agencies represented by our questionnaire sample, of those responding to the question on whether they were familiar with the project, we estimated that

- 54 percent had little or no information on the project,
- 30 percent were familiar only with project objectives or methods,
- 14 percent had read some (11 percent) or a substantial number (3 percent) of project reports and critiques, and
- only 2 percent had reviewed project material sufficiently to determine its usefulness to their assessment programs.

Only about one-fourth of those able to determine its usefulness consider the project's concepts, methods, and materials highly or very highly useful; another one-half consider them moderately useful; and the remainder consider them of limited or of no usefulness.

According to National Assessment officials, the project has restricted its services to local education agencies because of its limited resources. Usually, the project only provides local agencies with materials and communicates by telephone or mail about general problems. In certain instances, the project provides further technical assistance if the local assessment is part of a State assessment plan adapting National Assessment methodology, or if the National Assessment foresees the possibility of demonstrating an innovative local use of the project's procedures.

Perhaps because of its recent publicity campaign, the project received about 1,200 requests for information on project findings or methods from local school districts between October and December 1975, according to project officials. The officials also indicated that many districts have adopted project materials.

The project has directly assisted at least 12 school districts which either participate in a State assessment program or have demonstrated the staff and funding capability for carrying out an effective local program.

Based on our questionnaire data, the number of local assessment programs appears to be growing. Of the local education agencies represented by our sample that responded to the question, 15 percent have an assessment program and 30 percent are planning one. Only 8 percent, however, use or intend to use tests based on educational objectives, compared to about three-fourths of the States.

Sources of technical assistance most frequently cited by local education agencies as those they have used or will use in order of frequency were: consultants, State education agencies, commercial testing services, the Office of Education, colleges and universities, and the National Assessment. Our data also shows that the larger the district is, the more familiar it is with the National Assessment.

The National Assessment provided the following examples of how local school programs can use project assistance.

--One suburban school district in the East was interested in comparing the writing skills of its 13- and 17-year-olds to other suburban children. By using National Assessment materials and assistance, the district was able to carry out a districtwide mini-assessment of writing which revealed that its students were performing above suburban levels in all but a few instances.

--A school district in the Midwest wanted to take a fresh, hard look at the education needs of its students. After deciding what they should be teaching, the local officials looked to the National Assessment for help in finding out how well they were achieving their educational goals. They found that a number of the project's questions reflected local district objectives. By selecting those questions to use in their local evaluation program, school officials were able to compare local student performance with national performance levels. Local officials noted that

duplicating the National Assessment's questions and methods saved time and money. The evaluation program showed that their students' overall achievement is generally superior or equal to national levels.

INFORMATION ON ACHIEVEMENTS IN ASSESSED LEARNING AREAS

The National Assessment's goals include (1) acquiring data on the educational attainments of young Americans and (2) detecting changes in those attainments.

The first assessments, which began in the spring of 1969, covered citizenship, science, and writing. The following table illustrates the subject areas assessed or to be assessed through 1976.

<u>Date</u>	<u>Subject areas</u>
Mar. 1969 - Feb. 1970	Science, writing, citizenship
Oct. 1970 - Aug. 1971	Reading, literature
Oct. 1971 - Aug. 1972	Music, social studies
Oct. 1972 - Aug. 1973	Mathematics, science
Oct. 1973 - Aug. 1974	Writing, career and occupational development
Oct. 1974 - Aug. 1975	Reading, art
Oct. 1975 - Aug. 1976	Social studies/citizenship

As of January 1976, the National Assessment had published 51 reports based on assessment results for selected age groups in 10 learning areas. The reports included the following.

- Political Knowledge and Attitudes drew information from the social studies assessment results that could possibly contribute information regarding America's political health.
- Contemporary Social Issues describes America's social awareness.
- A Perspective on the First Music Assessment provides National Assessment results in the context of expert consultant views on research, curriculum, and teaching issues related to music.
- Consumer Math, Selected Results from the First National Assessment of Mathematics focuses upon mathematical skills needed by the American consumer to function effectively in the marketplace.

National achievement patterns

Examples of the information the National Assessment has developed for several assessed subject areas follow.

- The 1969-70 science assessment showed that males' overall performance was higher than females' at all ages and that the gap widened with age. Males demonstrated a more thorough knowledge of physical science, and females seemed to have a better knowledge of biological science.
- The 1970-71 reading assessment showed that most Americans tested read well enough to accomplish simple practical kinds of tasks. The overall reading ability of blacks was lower than any other group sample, including geographic and other groupings. School-age males read less well than school-age females, but adult men and women had about the same reading ability. People from families in which neither parent had gone to high school and those from inner city areas read less well than most other groups of people.
- The 1971-72 social studies assessment showed that young Americans lacked knowledge of the fundamentals of politics and civil rights.
- The 1972-73 science assessment showed a decline from the 1969-70 assessment at all three school ages surveyed in most questions measuring knowledge and skills. Two groups that achieved lower scores on the earlier test, students in the Southeast region and rural residents, improved their relative national standing but still performed generally below the national level.
- The 1973-74 writing assessment showed a decline from the results of the 1969-70 assessment in the writing ability of 13- and 17-year-olds. Nine-year-olds gained slightly in writing ability over this period.

SPECIAL STUDIES OF SELECTED LEARNING AREAS

A National Assessment goal is to conduct special studies in selected areas of educational attainment. The National Assessment's system for sampling national populations allows special studies--intended to answer some specific questions--to be made in conjunction with regular assessments without overburdening data collection efforts. This provides additional data while allowing time and resource savings.

The National Assessment's major effort in this area has been to assist the Office of Education's Right to Read program by making a special study of functional literacy to meet the program's needs. Right to Read is intended to reduce national illiteracy. The study was intended to discover how many 17-year-olds are unable to read well enough for productive employment and citizenship. This assessment involved administering two extra test booklets of specially selected National Assessment reading exercises to 5,200 17-year-olds for 2 successive years. The cost of about \$350,000 was paid by Right to Read. A Right to Read program official told us that this study has been useful in defining program needs and suggesting areas needing curriculum modification to school administrators and teachers.

Although the National Assessment is planning to conduct other special studies in the next few years as part of its contractual obligations to HEW, Right to Read is the only Federal program that has separately reimbursed the project for a special study.

Another special study, planned for fiscal year 1976, is in the area of basic mathematics. The development of the assessment is based on previous National Assessment work in mathematics. Questions selected were used in the 1972-73 mathematics assessment.

Also being studied for possible later assessment is an "index of basic skills"--to determine what skills are fundamental to active and productive participation in American society and what questions might best detect the presence or absence of those skills.

According to National Assessment and National Center for Education Statistics officials, the special study approach--exemplified by the assessment made for the Right to Read program--is worthwhile, and efforts of this nature are an efficient and timely use of the National Assessment's capabilities. The project's report on its goals and accomplishments from 1969 through 1975 states that it would consider conducting a special study whenever an apparent need exists and sufficient staff time and resources are available. The National Assessment's 5-year plan for fiscal years 1976-80 also states that it intends to cooperate with others needing such data who are willing to bear the expense. However, National Assessment officials acknowledge that they have not adequately informed other agencies about the possibility of meeting their needs through this approach.

In view of the more than \$18 billion outlay for education programs projected in the President's fiscal year 1977 budget, opportunities likely exist for other Federal agencies to benefit from the special study approach in defining and meeting their program needs.

CONCLUSIONS

The National Assessment has contributed to American education, but certain improvements are warranted. The National Assessment has contributed to assessment technology by developing objective-referenced tests and implementing a model for assessment based on objectives. The project should continue developing and refining these tests to increase their acceptance and use by the educational community. The project has also facilitated, through technical assistance, the implementation of its methods and materials at the State level. However, when possible within the available funding, more emphasis should be given to similarly assisting local educational agencies. Finally, the National Assessment has demonstrated its capability for conducting special studies. Project officials agree that they need to better inform potential users about the potential of this approach. Opportunities likely exist for other Federal agencies to benefit from this approach in defining and meeting their program needs.

RECOMMENDATIONS TO THE SECRETARY OF HEW

To better utilize National Assessment capabilities, we recommend that the Secretary urge project management to:

- Continue developing and refining objective-referenced tests.
- Increase its technical assistance to local education agencies regarding its concepts, materials, and methods when possible within the available funding.
- Increase its efforts to serve Federal agencies and others by providing special studies for those who need and are willing to finance them. To help accomplish this, the project should better inform potential users of its capabilities in this area.

AGENCY COMMENTS

In a June 3, 1976, letter (see app. III), HEW agreed with the above recommendations and described the following actions planned to implement them.

- Having the National Assessment continue developing and refining objective-referenced tests.
- Urging the project to attempt, within the available funding, to increase its technical assistance to local education agencies.
- Encouraging the National Assessment to increase its efforts to provide special studies for various agencies and organizations. The National Center for Education Statistics and the project will also expand their efforts to inform Government agencies about the project's methods, materials, and findings and attempt to address the specific data needs of the various agencies.

THE NATIONAL ASSESSMENT'S COMMENTS

In an April 27, 1976, letter (see app. IV), the National Assessment agreed with our recommendations and described the following actions being taken or planned to implement them.

- Attempting to refine objective-referenced testing technology by insuring more representative coverage for science and mathematics assessments and conducting feasibility studies to solve problems of how to measure such difficult learning areas as problem-solving or speaking and listening skills.
- Creating more definitive documents to make it easier for local education agencies to use the project's materials.
- Exploring assistance that could be given to State agencies to enable them to provide needed technical assistance to local education agencies.
- More adequately informing those who may use National Assessment special studies of the project's capabilities in this area and expanding the project's special study efforts.

CHAPTER 4

IMPROVEMENTS NEEDED TO INCREASE THE USEFULNESS OF NATIONAL ASSESSMENT DATA

National Assessment data has been of limited usefulness to educational decisionmakers and, therefore, the project has been prevented from achieving its basic mission. To increase the usefulness of its data, the project needs to

- improve its planning for and attention to the needs of educational policymakers,
- improve data interpretation,
- provide for comparison of project test results with performance standards,
- revise its assessment approach so that it provides data appropriate for decisionmakers' needs, and
- improve dissemination of results.

National, State, and local officials have also made suggestions for increasing data usefulness, such as including finer geographic breakdowns and more demographic and background variables on assessment participants.

LIMITED USE OF NATIONAL ASSESSMENT DATA

The National Assessment's April 1974 5-year plan and other reports state that the project's basic mission is to be an important source of information useful to educational decisionmakers and practitioners in identifying problems, setting priorities, and determining progress. The National Assessment's report on its goals and accomplishments from 1969 through 1975 indicates that the project seeks to provide educational decisionmakers at the national level with concrete information to help them set priorities and allocate resources. The National Assessment's 5-year plan states that other data users include

- State and local education officials,
- curriculum developers and researchers, and
- the public.

Although all the officials we interviewed at HEW, research organizations, and test publishing firms were aware of the National Assessment, very few indicated that they had used project data and few could cite any use for the data as it is currently collected and presented.

Most congressional staff members and HEW officials (including those in the Office of the Assistant Secretary for Education and the Office of the Assistant Secretary for Planning and Evaluation) that we spoke with said that National Assessment data has not been used to set priorities or stimulate either legislative or program changes.

National Assessment officials, some officials from HEW (including the offices of the assistant secretaries), and some congressional staff members told us they believed National Assessment data was worth collecting generally because it may become very useful as more and more trend data is accumulated. They contended that over time, as more data is accumulated, more opportunities will arise for the data to indicate changes needed in legislation, programs, and curriculums.

State and local respondents to our questionnaire indicated that they have not used and do not plan to use National Assessment data for resource allocation purposes. Most of the local education agencies represented by our sample responses indicated that they have little or no information on the National Assessment. Only 2 percent of the local education agencies represented by our sample responses and about 75 percent of the State respondents said they were sufficiently familiar with National Assessment material to be able to determine its usefulness to their assessment programs.

The National Assessment's report on its goals and accomplishments from 1969 through 1975 states that its data has not stimulated expected curriculum redesign efforts. According to a major test publisher we spoke with, project results were not very relevant to curriculum objectives and were too far removed from the classroom level to be of use. HEW and project officials disagreed with this, stating that available evidence, including a series of articles in two professional journals for teachers discussing the implications of assessment results for curriculum and instruction, seems to contradict this opinion. (See pp. 58 and 64.) HEW and project officials noted, however, that the project clearly needs to better inform educational practitioners--such as teachers and curriculum specialists--about the project and its findings.

Three of the four test publishers interviewed stated that they could not see any use for the project's data in their testing activities. One thought that the data was useful as general information for the public, but only because it presents a broad view.

According to officials we interviewed at two State education agencies, the project's data is often not useful to them because the objectives on which the tests are based are different from the States' curriculum objectives. Officials from a university-affiliated research organization said that the National Assessment data must be tied to classroom curriculum objectives or it will remain unused. They consider the classroom teacher as potentially the greatest user.

Limited research application

Because the National Institute of Education is the research arm of HEW's Education Division, project officials expected that their data would stimulate Institute substudies or research to determine causes for particular sets of data. National Assessment officials noted, however, that no such studies have been made. Institute officials agreed and explained that the National Assessment's objectives and purposes for data collection differ from the Institute's and that this limits the application of Institute research questions to the National Assessment's data.

Other researchers stated that the project's data has not stimulated them to explore the data further. The project's report on its goals and accomplishments from 1969 through 1975 characterized the response of researchers, professional groups, legislatures, and others to its data as generally disappointing. The Director of the National Assessment told us that the project needs to get more educational researchers to work with project data and plans to take steps to bring this about.

BETTER PLANNING NEEDED TO MEET THE NEEDS OF DECISIONMAKERS

In our opinion, for survey data of the type the National Assessment collects to be most useful for decisionmaking, it is necessary to have adequate planning which includes obtaining input from those who will or may use the data. Such planning should increase the likelihood that (1) the data needs and decisions to be made are adequately defined, (2) the data will be usable, and (3) the data will be effectively communicated to the intended decisionmakers.

Not only should the Congress, HEW officials, researchers, and other educational decisionmakers know what the project has produced and how the data can be used, but National Assessment officials should know on a continuing basis what short- and long-term problems or questions these officials have that the project can try to answer.

Many national, State, and local decisionmakers indicated that National Assessment data has not been especially meaningful or relevant to them. Congressional staff said the data has been of little legislative use. HEW officials and congressional staff told us that National Assessment results often have not been relevant to policy questions because of the form, generality, and lack of connection between the data collected and decisionmakers' needs. Reports have been too technical, too lengthy, and not keyed to policy questions.

Congressional staff and HEW and State education agency officials told us that the National Assessment has made only limited efforts to link its data collecting efforts to decisionmakers--the Congress, HEW, State education agencies, and others.

One educational researcher also told us that project results have not been relevant to policy questions and suggested that the project set up a panel of experts to help it determine, 2 to 4 years in advance, future policy questions that will need assessment data. In his opinion, the project has developed the technical capability to address such policy questions.

An evaluation of the National Assessment made for the National Center for Education Statistics also concluded that the project staff and the Education Commission of the States should attempt to open new meaningful contacts with decisionmakers to discover their policy concerns and data needs. The evaluation noted that, unless the data is more relevant to policy questions and suggests possible causes of deficiencies, it is not reasonable to expect wide use of the data in social and educational decisionmaking.

The Director of the National Assessment told us that he wants to become more responsive to decisionmakers' needs. He stated that meetings have been initiated with national decisionmakers and that regional conferences with State and local officials are being planned to get their views on changes needed in the National Assessment.

NEED TO IMPROVE DATA INTERPRETATION

The usefulness of the National Assessment data depends greatly on its interpretation. Until the completion of our fieldwork in October 1975, the National Assessment had consistently refrained from interpreting its own findings. The project described questions asked and answers given without discussing the implications for the educational community, making inferences, or providing hints as to possible causes of deficiencies. This policy enabled the project (1) to avoid the possible political repercussions of appearing to be a national agency attempting to guide or dictate local curriculums and (2) to maintain an objective position in relation to the reader or user.

The National Assessment's policy, according to its officials, had been to gather data and encourage interpretation by those who had the expertise in the subject matter and who could apply criteria to the findings in order to discuss curricular implications. However, subject matter specialists and other outside groups did not use the data just because it was available as the project had expected, according to the project's report on its goals and accomplishments from 1969 through 1975.

Although disappointed by the few efforts made by the educational community to interpret its data, the project continued to feel that it should not interpret its own data. Therefore, in 1973 the project began to contract with subject matter specialists and organizations for interpretation. The National Assessment does not endorse or take responsibility for the data interpretations of these professional groups. Through fiscal year 1975 about \$150,000 had been spent for interpretative studies by organizations representing teachers of mathematics, English, science, and social studies. In our view, this is a minimal effort in relation to the millions of dollars spent for data collection.

According to a nationally recognized expert on testing and measurement, a major problem with the interpretations that have been made is that they have refrained from going beyond highly precise and highly probable statements, and policy decisions do not always require such precision and certainty. An HEW official agreed, stating that what is often required is trend data and an indication of the data's reliability.

Most State officials, researchers, test publishers, curriculum developers, and Office of Education officials we interviewed recommended that, to increase data utilization, the National Assessment interpret its own data. In our opinion,

the National Assessment can best interpret its own data, since it is most familiar with that data.

The Director of the National Assessment agreed that the project needs to interpret its data and that the lack of adequate interpretation is a valid criticism. He said that the National Assessment is starting to interpret its data by preparing short summary interpretive reports. We believe that these initial efforts should be continued and increased.

NEED TO COMPARE TEST RESULTS WITH PERFORMANCE STANDARDS

A factor contributing to the lack of interpretation of National Assessment data is the lack of standards against which test data can be compared to judge performance. An example of a performance standard might be: "80 percent of the 9-year-olds should meet this objective 90 percent of the time." The National Assessment contends that no one knows for sure what a reasonable percentage of success should be, partly because concrete achievement data has never been available. Because the project has not attempted to define them, establishing performance levels is left to the reader or interpreter of National Assessment reports.

Officials of two States told us that the people who work with the data should interpret it and draw implications in relation to standards. Three prominent researchers told us that the National Assessment should set standards for comparison to allow meaningful use and interpretation of project results. One researcher stated that he considers the project's current practices to be an invitation for misinterpretation. In our opinion, unless meaningful performance comparisons can be made, States, localities, and other data users are not as likely to find the National Assessment data to be useful.

An HEW official said that the lack of performance standards limits interpretive efforts. National Assessment data does not meaningfully assess how well groups of students are doing in relation to what they should be capable of doing. According to one State official from a State which has modeled its assessment after the National Assessment's model, some local school districts are setting standards for their local assessment to compare with State and National Assessment data.

The National Assessment recognizes that the lack of standards prevents (1) judgments on whether the performance of various groups is satisfactory and (2) cross-comparisons

between subject areas (for example, how good or bad performance in reading compares to performance in science). The National Assessment's 5-year plan for fiscal years 1976-80 states that the project is exploring this question and is planning, over the next several years, to develop procedures for comparing National Assessment results to meaningful performance standards.

NEED TO REVISE THE ASSESSMENT APPROACH

Assessment results are more useful when the assessment is designed so that the approach is related to the intended use of the data and the needs of the intended users. The project's assessment approach includes the subject or learning areas assessed; the test questions and objectives, sample size, and geographic and demographic variables used; and the methods of reporting and disseminating results.

With the limited funding available, the National Assessment believes the best approach to collecting useful information is documenting educational deficiencies and inequities and monitoring changes in them to attempt to influence policy. The issue, however, is whether the approach being followed is too narrowly conceived and inflexible, limiting the data's usefulness and preventing the project from undertaking possibly more valuable functions.

According to State officials, representatives of private and Government-sponsored research organizations, test publishers, HEW officials, and congressional staff, a major problem which limits data interpretations by either National Assessment staff, consultants to the project, or users results from the project's assessment approach.

HEW officials not directly responsible for the project specified that the data is too general to be of programmatic use, contains too few variables on background and demographic factors, is based on a sample unnecessarily large for issues of concern to decisionmakers, and needs too long a lead time. These views were shared by State decisionmakers, researchers, and test publishers.

The National Center for Education Statistics-sponsored evaluation of National Assessment previously mentioned noted that the substance of National Assessment data--attainments in traditional subject areas and changes over time--is of greatest interest at the State and local levels but the form in which the data is collected and reported--for example,

only on regional and national bases--greatly limits data usefulness to them. On the other hand, the substance is of minimal interest at the national level, where the form is most applicable. Thus the National Assessment data is not satisfying Federal, State, or local levels.

The evaluators suggested that the solution to this dilemma is to change either the substance, the form, or both. Because the project's chief current contribution to State and local levels seems to be in helping them to use aspects of its assessment model, the evaluators specifically suggested that the National Assessment find out what kind of information is needed at the national level and provide it. They cautioned against the project being too tied to its present assessment approach, stating that, if data usefulness cannot be increased through this approach, the necessary changes should be made to make the project a responsive instrument in solving education problems.

In our view the National Assessment has not demonstrated that the benefits of its assessment approach warrant the costs. The project's approach needs to be thoroughly reevaluated and redirected to improve the usefulness of its results. This includes exploring the costs and benefits of alternative approaches.

Project officials partially attribute the problems in the project's assessment approach to the historical and social environment existing when the National Assessment was conceived and implemented.

--The originators of the National Assessment wanted a systematic effort designed to gather general information about educational outcomes in the United States. The National Assessment was not designed to answer specific educational questions.

--The National Assessment was conceived as only one information-gathering project, which, along with others, would help to serve the needs of educational decisionmakers.

Therefore, political and other reasons have precluded the project since its inception from providing State- and local-level data. Nevertheless, the originators thought that assessment data would help national and State legislators in their funding decisions, as well as local school board members, teachers, and program administrators.

NEED TO IMPROVE DISSEMINATION

Effective dissemination of results increases their usefulness. The dissemination strategy should be an integral part of the project planning process.

In the early years the National Assessment staff was largely concerned with the problems of contract monitoring, sampling, data analysis, and test objectives and question development. Little time, money, or staff were applied to developing reports. In fact, the staff did not fully assume responsibility for communicating its results until fiscal year 1971, and a major shift of attention to report writing and dissemination was not made until fiscal year 1973. Project officials attribute this shift to the need to get information to different audiences in different ways.

Our questionnaire results show that most State respondents are well informed about the National Assessment but that its impact at the local level has been minimal. Only 2 percent of the local education agencies represented by our sample have extensively reviewed project material, and 54 percent have little or no information on the National Assessment. At 73 percent of the local education agencies, National Assessment reports have not been read or evaluated.

Project officials told us that they have minimal control over the dissemination of their reports because they are sold through the Government Printing Office. They said that such dissemination has caused them some concern. First, the National Assessment cannot identify who data users or buyers are, and second, potential buyers of project reports might have trouble obtaining reports. Project staff based the latter statement on a test they made in which they requested several recent reports but received only three, all dating back to 1971. According to National Center for Education Statistics officials, the Government Printing Office is cooperating with them to try to solve this problem.

National Assessment officials said that, within the constraints of limited staff and resources, they are attempting to improve the dissemination of information to decisionmakers by

- mailing information on each newly published report to about 200 people and mailing a bimonthly newsletter to about 23,000;
- distributing press releases and holding press conferences when important findings are released;

--releasing previously unreleased test objectives and questions and providing access to computer data tapes of all project findings;

--writing articles for magazines, journals, and newspapers; and

--including reports in the Education Resources Information Center, commonly known as ERIC.

In addition, the National Assessment has tried to improve the dissemination of assessment data by

--simplifying and shortening reports,

--writing different types of reports for different audiences, and

--responding to specific data analysis requests from the Office of Education and others.

OTHER SUGGESTIONS FOR INCREASING DATA USEFULNESS

Many State and local education officials and others suggested that National Assessment data include finer geographic breakdowns (such as by State) and many more demographic and background variables (such as information on the family and educational background of those sampled).

The evaluation of the National Assessment previously referred to recommended that the project consider including additional background variables and that it study carefully the usefulness of the current sampling approach, which is on a regional basis, to determine whether eliminating it and only retaining a national sample would save much money or time.

Of the 32 State questionnaire respondents and the small number of local education agencies (104 of the more than 8,900 represented by our sample responses) who suggested improvements in National Assessment studies:

--15 States and 65 percent of the local education agencies recommended smaller geographic breakdowns, such as by State or county.

--15 States and 53 percent of the local education agencies saw a need for further developing tests based on educational objectives.

--11 States and 40 percent of the local education agencies believed there is a need to relate National Assessment data to Office of Education elementary and secondary education program evaluations.

--Only 3 States but 36 percent of the local education agencies believed more demographic breakdowns are needed.

--4 States and 12 percent of the local education agencies believed an increase is needed in technical guidance to initiate comparable State assessments.

--2 States and 13 percent of the local education agencies believed an increase is needed in the number of age groups assessed.

Officials we interviewed from two States said that the National Assessment should move from being primarily a data-collecting operation to a service-oriented one, providing (1) models for assessment, (2) guidance or assistance, and (3) storage of and access to subject area objectives and test questions.

We note that several of the above suggestions involve different costs and consequences. For example, providing data on a State-by-State basis would mean, according to National Assessment officials, increasing the sample size for each State to the level currently used for a region and increasing current costs tenfold.

On the other hand, National Assessment officials agreed that restricting their work to focus on service and research could reduce costs. This would also mean, however, abandoning the assessment approach and the baseline data developed thus far.

A concentrated effort to assist States and localities would involve some problems because of different assessment requirements of each State and locality and the costs involved. These differences could involve potential problems ranging from State laws requiring the use of norm-referenced tests for assessment, to different curriculum objectives, to preferences regarding collecting data on individual pupil performance versus groups of pupils.

Although States originally opposed State-level data collection by the National Assessment, our questionnaire results show a tendency toward greater acceptance of this approach. National Assessment officials agreed that some States are now willing to let the National Assessment collect State data.

According to project officials, they are willing to cooperate with any State wanting assistance and can expand the National Assessment sample for any State at the State's expense.

National Assessment officials are studying the possibility of substituting other background variables--which are compatible with factors in other educational studies--for currently used variables which overlap. They agree that this could assist in presenting better descriptive data.

CONCLUSIONS

National Assessment results have been of limited usefulness to educational decisionmakers, researchers, and practitioners. This has prevented the project from achieving its basic mission--to be an important source of information useful to educational decisionmakers and practitioners in identifying problems, setting priorities, and determining progress.

Reasons for limited use of project results are

- planning which is inadequate to recognize the needs of educational policymakers,
- lack of attention to data interpretation by the project,
- lack of comparison with performance standards,
- an assessment approach which provides inappropriate data for decisionmaking, and
- inadequate dissemination of results.

The National Assessment has demonstrated that acquiring data on educational attainments and measuring changes over time are possible. (See ch. 3.) It has not demonstrated that the benefits of the project's assessment approach warrant the costs. The benefits and costs of alternative approaches also need to be explored.

RECOMMENDATIONS TO THE SECRETARY OF HEW

To make the project's results more useful, we recommend that the Secretary redirect the project by (1) identifying the informational and other needs of decisionmakers, (2) determining the feasibility and cost effectiveness of alternative approaches for collecting and reporting educational assessment data and providing other services to satisfy those needs, and (3) deciding on the assessment approach to be used. Although consultation with project officials seems necessary during this process, we believe it is also important to seek

the views of users or potential users of project results at national, State, and local levels and of recognized experts in educational management, assessment, and research.

Examples of possible alternative strategies for the National Assessment include:

- Restricting the project's data collection efforts and primarily providing assessment models, test objectives and questions, and technical assistance concerning assessment to States, local school districts, etc.
- Expanding the project's data collection efforts to provide more information on geographic, demographic, or background variables.
- Focusing data collection efforts on the information needs of one level of government, such as the Federal level, and restructuring subject areas, sample size, and demographic and background variables to serve those needs within a shorter time frame.
- Making more modest changes in the present mixture or manner of providing technical assistance, planned assessment data, and special studies.

To increase the use and improve the usefulness of National Assessment data, we recommend that the Secretary require project management to:

- Establish continuous dialogues with the Congress, executive agencies, and State and local policymakers to determine their data needs and how the National Assessment can best meet those needs.
- Continue and increase recent efforts to interpret project data so as to rely less on others for data interpretation.
- Provide for comparison of its test results with performance standards by giving greater emphasis to developing the procedures needed to compare those results to generally acceptable non-Federal standards.
- Improve its communication and cooperation with the National Institute of Education and other educational researchers to facilitate possible further research on and interpretation and use of National Assessment results.

--Improve dissemination of National Assessment results.

AGENCY COMMENTS

Regarding our recommendation that it redirect the project, HEW stated that it does not believe redirection is warranted until an extensive reexamination of the project's fundamental assumptions and guiding principles has been completed in conjunction with substantive experts, user groups, and others. The National Center for Education Statistics is conducting internal studies and consultations with various agencies and individuals to decide on the necessity, nature, or extent of any redirection. HEW stated that the results of this reexamination should enable agency officials to determine whether or not the project should move to a substantially new design approach or attempt to improve and expand the present model and conceptual framework. HEW also noted that in any new model, provision must be made for interrelating the present and proposed data systems to conserve the value of the data that has been accumulated for a decade at the cost of approximately \$40 million.

Regarding our recommendation that HEW require the project to give greater emphasis to developing the procedures needed to compare its test results to generally acceptable standards, HEW stated that it will (1) explore with the project's staff the problem of standards, including the procedures and technical considerations associated with achieving comparisons with standards, and (2) encourage efforts to provide the technical and methodological guidance needed for policymakers at various levels to make their own comparisons or judgments concerning appropriate standards. The project went beyond this and agreed to provide for comparison of its test results with performance standards.

We believe that lack of performance standards is an important factor limiting the usefulness of the project's data and that HEW should require the project to put greater emphasis on solving this problem. In spite of HEW's unwillingness to make this a requirement, the project's commitment to provide for such comparison with standards is a good first step toward solving the problem.

HEW agreed with our other recommendations and described the following actions taken or planned to implement them.

--Focusing the project's greatest efforts during the next few years on establishing continuous dialogues with Federal, State, and local policymakers to determine how the project can best meet their needs. This

includes holding a series of meetings throughout the country with various users and potential users of project data. It also includes examining existing practices and procedures at Federal, State, and local levels where assessment, research, or survey data is used in the decisionmaking process to identify (1) information needs for educational decisionmaking, with particular emphasis on the Federal level, and (2) information and other needs for curriculum development and improvement. This process would be intended to probe in depth how specific information is used for decisionmaking, identify specific data needed for selected kinds of decisionmaking, and determine the best ways of establishing continuous dialogues with user groups.

- Requiring the project to continue and expand its data interpretation efforts and to strengthen its present analysis capability. HEW pointed out that the future constraint it envisioned is the project's inability to retain enough experts to permit it to interpret all its findings. Therefore, researchers and others would also be encouraged to continue to examine and report on project data from a variety of perspectives.
- Having the National Center for Education Statistics (1) give more attention to both formal and informal relationships with the National Institute of Education and other Federal agencies and (2) explore various options available to encourage further analysis of project data by educational researchers.
- Continuing to seek the cooperation of the Government Printing Office in improving the distribution of National Assessment reports and exploring the possibility of the project distributing the reports and other publications directly.

THE NATIONAL ASSESSMENT'S COMMENTS

The National Assessment agreed with all our recommendations and described the following actions being taken or planned to implement them.

- Identifying decisionmakers' information needs and evaluating alternative approaches for presenting project data.
- Creating an Office of Application within the National Assessment to identify assessment-related information of Federal, State, and local education decisionmakers.

- Conducting a series of eight future-focus conferences with teachers, local and State administrators, members of national educational organizations, Federal officials, and university researchers to provide input for the project's planning process.
- Arranging meetings with key congressional leaders to try to establish continuing dialogues with the Congress.
- Continuing its efforts to interpret project data.
- Attempting to develop and disseminate a methodology with which State and local education agencies can establish their own standards and submitting a foundation grant proposal in an attempt to establish the feasibility of contrasting actual performance with preestablished standards.
- Attempting to establish a working relationship with the National Institute of Education through meetings, briefings, and the exchange of information and taking other steps to establish working relationships with other education researchers to facilitate research on and use of project results.
- Continuing to improve dissemination of project results through such actions as increased newsletter circulation, presentation of papers at national conferences and professional meetings, and media coverage of project results.

RESULTS OF GAO'S
STATE EDUCATION AGENCY QUESTIONNAIRE

	Number responding from 50 (note a)	<u>Responses</u> Number Percent (note b)	
<u>National Assessment of Educational Progress</u>			
1. How familiar are you with the National Assessment of Educational Progress (NAEP) project sponsored by the Office of Education (OE) through the Education Commission of the States? (Check the <u>one</u> response which best expresses your familiarity with NAEP) (note c)	50		
___ Have little or no information		0	0
___ Familiar with the purpose and major objectives		4	8
___ Familiar with the project methods and specific objectives		1	2
___ Read some project reports and critiques		4	8
___ Read a substantial number of project reports and critiques		4	8
___ Conducted sufficient reviews and evaluations of NAEP material to determine its utility in your assessment program		<u>37</u>	<u>74</u>
			<u>100</u>
2. If you have read or evaluated any of NAEP's survey results and/or objective booklets, which of the following NAEP survey learning areas are you familiar with? If none, skip this question. (Indicate your answer by checking the appropriate responses.)	45		
___ Science		32	71
___ Writing		29	64
___ Citizenship		36	80
___ Reading		41	91
___ Literature		18	40
___ Music		18	40
___ Social studies		24	53

Note: If you have checked the last response in question 1 above indicating that you have assessed the utility of NAEP applications to your State, continue. If not, go to question 7.

APPENDIX I

APPENDIX I

	Number responding from 50 (note a)	Responses	
		Number	Percent (note b)
3. What utility do the concepts, methods and materials developed by NAEP have for your State education program? (Check the one response which best expresses your position.)	36		
___ Little or no utility		0	0
___ A limited degree of utility		7	19
___ A moderate degree of utility		9	25
___ A high degree of utility		12	33
___ Very high degree of utility		8	22
		<u>d/100</u>	
4. Have you used or do you plan to use any of the NAEP concepts, methods, or materials in your State education program?	35		
___ Yes (continue)		32	91
___ No (go to question 7)		3	9
		<u>100</u>	
5. On which of the following State education activities have you either used or planned to use NAEP concepts, methods, or materials?	32		
___ State policy planning		7	22
___ State assessment planning and evaluation		23	72
___ Development of educational objectives		13	41
___ Instructional methods and curriculum planning and evaluation		3	9
___ Resource allocation		0	0
___ Educational accountability		10	31
___ State assessment comparisons		16	50
___ Within State assessment comparisons		12	38
___ Program evaluations		7	22
___ Diagnostic and/or individual needs assessment methodology		4	13
___ Other (please specify)		5	16

APPENDIX I

APPENDIX I

	Number responding from 50 (note a)	<u>Responses</u> <u>Number</u> <u>Percent</u> (note b)	
6. What ways would you suggest to improve the utility of NAEP studies to you? (Check all that apply.)	32		
_____ None		2	6
_____ Wider dissemination of NAEP studies		5	16
_____ Technical guidance to initiate comparable State assessments		4	13
_____ Smaller geographic breakdowns, such as by State or county		15	47
_____ More detailed demographic breakdowns		3	9
_____ Relate NAEP data to OE-ESEA (Elementary and Secondary Education Act) program evaluations		11	34
_____ Increase the scope of the development of criterion-referenced tests (note e)		15	47
_____ Increase the range of age assessments		2	6
_____ Improve the quality of the criterion-referenced tests (e.g., improve validity, reduce biases and error, etc.)		9	28
_____ Other (please specify)		9	28
7. Have you attended an annual State assessment workshop/seminar sponsored by NAEP?	50		
_____ Yes		31	62
_____ No		<u>19</u>	<u>38</u>
			<u>100</u>
8. Have you had discussions concerning the benefits of this NAEP-sponsored workshop/seminar with any of your colleagues within the State who have attended?	48		
_____ Yes		37	77
_____ No		<u>11</u>	<u>23</u>
			<u>100</u>
If yes to either question 7 or 8, continue; if no to both, skip to 10.			

APPENDIX I

	Number responding from 50 (note a)	<u>Responses</u> Percent (note b)	
		<u>Number</u>	<u>Percent</u>
9. How beneficial do you think this workshop/seminar is?	37		
___ Of little or no benefit		1	3
___ Of some benefit		3	8
___ Of moderate benefit		14	38
___ Of substantial benefit		14	38
___ Of very substantial benefit		5	14
___ No basis to judge		<u>0</u>	<u>0</u>
			<u>d/100</u>
<u>State Assessment Programs</u>			
10. Do you have or are you planning a statewide assessment program? (Check one.)	50		
___ Yes, have a program (continue)		40	80
___ Yes, planning a program (continue)		7	14
___ No (go to question 14)		<u>3</u>	<u>6</u>
			<u>100</u>
11. Which of the following types of tests, if any, have been or will be used extensively in your statewide assessment program? (Check one or more.)	47		
___ Standardized norm-referenced tests (e.g., the Stanford Achievement Test (SAT), the Wechsler Intelligence Scale for Children (WISC), etc.)		19	40
___ Criterion-referenced tests (CRT) (e.g., educational objectives stated in behavioral or performance terms)		36	77
___ Other tests (please specify)		14	30
___ None		0	0

APPENDIX I

APPENDIX I

	Number responding from 50 (note a)	Responses	
		Number	Percent (note b)
12. Which of the following sources have provided or are scheduled to provide formal technical assistance for your statewide assessment program?	46		
___ National Assessment of Educational Progress		23	50
___ National Institute of Education (NIE)		0	0
___ Office of Education		4	9
___ Center for the Study of Evaluation at the University of California at Los Angeles (UCLA)		6	13
___ Other NIE-sponsored centers for educational research and evaluation		3	7
___ Other colleges and universities (specify)		12	26
___ National commercial testing services (specify)		16	35
___ Consultants		28	61
___ Other (specify)		9	20
___ None of the above		3	7
13. Do you intend to compare your statewide assessment results with interstate and national assessment data?	47		
___ Yes, NAEP data		18	38
___ Yes, other interstate and national assessment data		0	0
___ No		29	62
			<u>100</u>

14. From your experience, how great is the need, if any, to increase the effort by the educational community devoted to measurement and assessment techniques in any of the following areas? (Indicate your answer by checking the appropriate column for each of the seven line items listed below.) (note f)

	Number responding from 50 (note a)	Little or no increase Num- ber	Per- cent	Some increase Num- ber	Per- cent	Moderate increase Num- ber	Per- cent	Substantial increase Num- ber	Per- cent	Very great increase Num- ber	Per- cent
(1) Development of methods for test design and construction	48	3	6	9	19	11	23	17	35	8	17
(2) Reduction of cultural, racial, and sexist biases in tests	49	3	6	10	20	11	22	15	31	10	20
(3) Development of alternatives to the classic standardized norm-referenced tests (e.g., criterion referenced tests)	48	2	4	3	6	6	13	16	33	21	44
(4) Development of more and improved standardized norm-referenced tests	50	17	34	20	40	4	8	7	14	2	4
(5) Development and utilization of methods to better evaluate standardized norm-referenced tests in use	50	9	18	14	28	7	14	9	18	11	22
(6) Development and implementation of methods for the dissemination and utilization of assessment techniques for educational practitioners	46	1	2	0	0	4	9	14	30	27	59
(7) Other (specify)	10	1	10	0	0	1	10	1	10	7	70

- a/In April 1975 we sent the questionnaire to the education agencies in all States and the District of Columbia. By June 1975 the District of Columbia and all but one State responded. For purposes of compiling responses to the questionnaire, the District of Columbia is considered to be a State.
- b/This column shows the percentage of respondents to the question that chose each specific answer. Percentages are not totaled on those questions for which more than one response could be checked.
- c/The NAPP project is currently sponsored by the National Center for Education Statistics in the Department of Health, Education, and Welfare.
- d/Total does not add due to rounding.
- e/Criterion-referenced tests are tests specifically constructed to measure students' attainment of specific educational objectives or proficiency with specified curriculum material. These tests, which may be standardized, usually provide a criterion to indicate attainment of the educational objectives. For example, the student must be able to compute the correct product of all single digit numerals greater than zero with no more than five errors.
- f/The percent columns show the percentage of respondents to each line item that chose each category. The percentages on each line total 100, except on line (2) due to rounding.

APPENDIX II

APPENDIX II

RESULTS OF GAO'S
LOCAL EDUCATION AGENCY QUESTIONNAIRE

	Number of projected responses from 8941 (note a)	Responses	
		Number (note a)	Percent (note b)
<u>National Assessment of Educational Progress</u>			
1. How familiar are you with the National Assessment of Educational Progress (NAEP) project sponsored by the Office of Education (OE) through the Education Commission of the States? (Check the one response which best expresses your familiarity with NAEP.) (note c)	8242		
___ Have little or no information		4412	54
___ Familiar with the purpose and major objectives		1985	24
___ Familiar with the project methods and specific objectives		506	6
___ Read some project reports and critiques		917	11
___ Read a substantial number of project reports and critiques		275	3
___ Conducted sufficient reviews and evaluations of NAEP material to determine its utility in your assessment program		<u>147</u>	<u>2</u>
			<u>100</u>
2. If you have read or evaluated any of NAEP's survey results and/or objective booklets, which of the following NAEP survey learning areas are you familiar with? If none, skip this question. (Indicate your answer by checking the appropriate responses.)	2222		
___ Science		783	35
___ Writing		438	20
___ Citizenship		626	28
___ Reading		1658	75
___ Literature		283	13
___ Music		477	21
___ Social studies		842	38

Note: If you have checked the last response in question 1 above indicating that you have assessed the utility of NAEP applications to your local education agency (LEA), continue. If not, go to question 7.

APPENDIX II

APPENDIX II

	Number of projected responses from 8941 (note a)	Responses	
		Number (note a)	Percent (note b)
3. What utility do the concepts, methods, and materials developed by NAEP have for your LEA education program? (Check the one response which best expresses your position.)	147		
___ Little or no utility		1	1
___ A limited degree of utility		40	27
___ A moderate degree of utility		72	49
___ A high degree of utility		13	9
___ Very high degree of utility		<u>21</u>	<u>14</u>
			<u>100</u>
4. Have you used any of the NAEP concepts, methods, or materials in your LEA education program?	146		
___ No (go to question 7)		104	71
___ Yes (continue)		<u>42</u>	<u>29</u>
			<u>100</u>
5. On which of the following local education activities have you used NAEP concepts, methods, or materials?	104		
___ Local policy planning		21	20
___ Local assessment planning and evaluation		63	61
___ Instructional methods and curriculum planning and evaluation		59	57
___ Resource allocation		0	0
___ Educational accountability		11	11
___ LEA assessment comparisons		12	12
___ Internal LEA assessment comparisons		34	33
___ Program evaluations		70	67
___ Diagnostic and/or individual needs assessment methodology		32	31
___ Other (please specify)		0	0

APPENDIX II

APPENDIX II

	Number of projected responses from 8941 (note a)	Responses	
		Number (note a)	Percent (note b)
6. What ways would you suggest to improve utility of NAEP studies to you? (Check all that apply.)	104		
_____ None		18	17
_____ Wider dissemination of NAEP studies		32	31
_____ Technical guidance to initiate comparable State assessments		12	12
_____ Smaller geographic breakdowns, such as by State or county		68	65
_____ More detailed demographic breakdowns		37	36
_____ Relate NAEP data to OE-ESEA (Elementary and Secondary Education Act) program evaluations		42	40
_____ Increase the scope of the develop of criterion-referenced tests (note d)		55	53
_____ Increase the range of age assessments		14	13
_____ Improve the quality of the criterion-referenced tests (e.g., improve validity, reduce biases and error, etc.)		38	37
_____ Other (please specify)		0	0

Local Education Agency Testing Programs

7. Do you have or are you planning an LEA-wide testing program? (Check one.)	8429		
_____ No		1384	16
_____ Yes, have a program		5909	70
_____ Yes, planning a program		<u>1140</u>	<u>14</u>
			<u>100</u>
8. Do you have or are you planning an LEA-wide assessment program which involves more testing than the regular district testing programs or involves more than the State assessment program, if one exists?	8447		
_____ No		4633	55
_____ Yes, have a program		1242	15
_____ Yes, planning a program		<u>2572</u>	<u>30</u>
			<u>100</u>

If yes to either question 7 or 8, continue; if no to both, go to question 12.

APPENDIX II

APPENDIX II

Number of
projected
responses
from 8941
(note a)

Responses	
Number (note a)	Percent (note b)

9. Which of the following types of tests do you usually administer or expect to administer in either the testing or assessment program? (Check one or more)

4642

___ Standardized norm-referenced tests (e.g., the Stanford Achievement Test (SAT), the Wechsler Intelligence Scale for Children (WISC), etc.)

4171 90

___ Criterion-referenced tests (e.g., educational objectives stated in behavioral or performance terms)

366 8

___ Other tests (specify)

297 6

10. Do you intend to compare your LEA-wide assessment with other LEA, State, interstate, or national assessments?

4626

___ No

2031 44

___ Yes, LEA

895 19

___ Yes, State

1230 27

___ Yes, interstate

13 1

___ Yes, national

1328 29

___ No basis to judge

185 4

11. Which of the following sources have provided or are scheduled to provide formal technical assistance for your statewide assessment program?

4201

___ National Assessment of Education Progress

244 6

___ National Institute of Education (NIE)

30 1

___ Office of Education

409 10

___ Center for the Study of Evaluation at the University of California at Los Angeles (UCLA)

27 1

___ Other NIE-sponsored centers for educational research and evaluation

0 0

___ Other colleges and universities (specify)

291 7

___ National commercial testing services (specify)

547 13

___ Consultants

627 15

___ Other (specify):

Local school district

29 1

State education agency

612 15

___ None of the above

2158 51

58

12. From your experience, how great is the need, if any, to increase the effort by the educational community devoted to measurement and assessment techniques in any of the following areas? (Indicate your answer by checking the appropriate column for each of the seven line items listed below.) (note e)
- (1) Development of methods for test design and construction
- (2) Reduction of cultural, racial, and sexist biases in tests
- (3) Development of alternatives to the classic standardized norm-referenced tests (e.g., criterion-referenced tests)
- (4) Development of more and improved standardized norm-referenced tests
- (5) Development and utilization of methods to better evaluate standardized norm-referenced tests in use
- (6) Development and implementation of methods for the dissemination and utilization of assessment techniques for educational practitioners.
- (7) Other (specify)

Projected number responding from 8941	Little or no increase		Some increase		Moderate increase		Substantial increase		Very great increase	
	Num-ber (note a)	Per-cent	Num-ber (note a)	Per-cent	Num-ber (note a)	Per-cent	Num-ber (note a)	Per-cent	Num-ber (note a)	Per-cent
7410	1801	24	1645	22	1457	20	1495	20	1012	14
7398	2241	30	1321	18	1256	17	1465	20	1116	15
8028	1477	18	1296	16	1195	15	2139	27	1922	24
8019	2097	26	1600	20	2145	27	1303	16	874	11
8001	1149	14	1590	20	1853	23	1959	24	1450	18
8026	886	11	1180	15	1332	17	2243	28	2385	30
328	44	13	0	0	0	0	76	23	208	63

- a/In April 1975 we sent the questionnaire to a national statistical sample of 832 local school districts. By June 1975 we received responses from 710 school districts or 85 percent. The numbers shown above represent the number of local school districts in the Nation--out of the 11,666 in the defined universe with 300 or more pupils--to which our local questionnaire sample responses have been projected. We projected a total of 8,941 local education agencies responding instead of 11,666 for technical reasons--based on the weighting and the response rates across the various strata in our sample. This method allows us to obtain the most accurate percentage breakdowns on the answers given.
- b/This column shows for each question the percentage of projected respondents choosing each specific answer. Percentages are not totaled on those questions for which more than one response could be checked.
- c/The NAEP project is currently sponsored by the National Center for Education Statistics in the Department of Health, Education, and Welfare.
- d/Criterion-referenced tests are tests specifically constructed to measure students' attainment of specific educational objectives or proficiency with specified curriculum material. These tests, which may be standardized, usually provide a specific and operational description of the level and type of task performance or behavioral measures used as a criterion to indicate attainment of the educational objectives. For example, the student must be able to compute the correct product of all single digit numerals greater than zero with no more than five errors.
- e/The percent columns show the percentage of projected respondents to each line item choosing each category. The percentages on each line total 100, except on lines (5), (6), and (7) due to rounding.



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20201

June 3, 1976

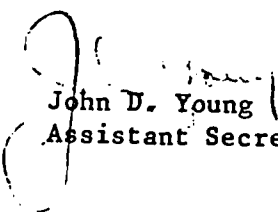
Mr. Gregory J. Ahart
Director, Manpower and
Welfare Division
United States General
Accounting Office
Washington, D.C. 20548

Dear Mr. Ahart:

The Secretary asked that I respond to your request for our comments on your draft report entitled "The National Assessment of Educational Progress: Its Results Need to be Made More Useful." The enclosed comments represent the tentative position of the Department and are subject to reevaluation when the final version of this report is received.

We appreciate the opportunity to comment on this draft report before its publication.

Sincerely yours,


John D. Young
Assistant Secretary, Comptroller

Enclosure

Comments of the Department of Health, Education, and Welfare
on the Comptroller General's Report to the Congress entitled,
"The National Assessment of Educational Progress: Its Results
Need to be Made More Useful" -- March 17, 1976 B-164031(1)

DEPARTMENT OVERVIEW

We appreciate the review that the General Accounting Office (GAO) has conducted. The report is very helpful in identifying many of the issues and problems associated with the development and conduct of the National Assessment of Educational Progress (NAEP). NAEP is addressing many of the recommendations in its present planning as well as in its current program operations.

While it is difficult to establish the immediate policy and curriculum relevance of NAEP results, they do provide specific information as well as a broad view of educational achievement over time for various population subgroups. Although it is next to impossible to ascertain the short term effects of such information about educational progress, we believe that National Assessment will have significant long range effects on educational decision making. Only now, with the availability of data pertaining to changes in educational attainment over time, is the National Assessment in a position to begin providing meaningful trend data. Further, we believe that recent analysis and reporting pertaining to consumer mathematics knowledge and regional and racial trends in science achievement highlight the more immediate benefits of current NAEP data collection efforts. Use of the NAEP model and materials by State and local education agencies is another illustration of the proximate value of NAEP. Therefore, we do not believe a redirection of NAEP is warranted until an extensive re-examination of its fundamental assumptions and guiding principles in conjunction with theoreticians, substantive experts and user groups has been completed.

With reference to the recommendation in the introductory section concerning the importance of seeking "... the views of users or potential users of project results at national, State and local levels and of recognized experts in educational management, assessment, and research," we wish to make note of the fact that the project has done this in the past and is presently expanding its efforts in this area. In addition, the National Center for Education Statistics (NCES) has expanded its involvement with consumer groups and technical experts and also has a newly mandated advisory committee to which it may turn for advice. Thus, it might be reasonable to

recommend an expansion of these types of interactions with the "field;" however, we do not think the implication, which may be drawn by some, that this is a concept that is new or foreign to either NCES or NAEP should be allowed to stand.

COMMENTS ON GAO RECOMMENDATIONS

Some of the activities recommended by GAO are inter-related; therefore, comments are made for them as a group to avoid repetition.

GAO RECOMMENDATION

The Secretary, HEW, redirect the project by (1) identifying the information and other needs of decisionmakers, (2) determining the feasibility and cost effectiveness of alternative approaches for collecting and reporting educational assessment data and providing other services to satisfy those needs, and (3) deciding on the assessment approach to be used. It is also important to seek the views of users or potential users of project results at national, State, and local levels and recognized experts in educational management, assessment, and research.

DEPARTMENT COMMENTS

As mentioned in the introductory comments, we disagree with the conclusion that redirection is warranted at this time. NCES is conducting internal studies and consultations with various agencies and individuals to decide on the necessity, nature or extent of any redirection.

Also, if a new model is to be developed provision must be made for cross walks between present and proposed data systems, to conserve the value of the data that have been accumulated for a decade at the cost of approximately \$40 million. Results of the re-examination presently underway through the regional meetings mechanism and more extensive NCES-ASE reviews should enable us to determine whether or not NAEP should move to a substantially new and different design approach or attempt to improve upon and expand the present model and conceptual framework. In any event, a new model, if deemed appropriate and preferable to improving upon the present approach, would involve the investment of considerable time and personnel. We are attempting to determine the merits of various alternatives or options through a series of policy discussions which are designed to examine the future focus of NAEP.

GAO RECOMMENDATION

The Secretary require project management to:

Establish continuous dialogues with the Congress, executive agencies and State and local policymakers to determine their needs for data and how the National Assessment capabilities can best be used to meet those needs.

DEPARTMENT COMMENTS

We concur. During the next few years NAEP's greatest effort and potential for payoff must and will be focused in this area. In January, NAEP initiated a series of regional meetings throughout the country involving various groups of NAEP users and potential users, as well as national organizations and federal decision makers. These meetings are intended to identify decision-useful information needs. The present series of meetings will be completed in late May and a report to NCES will be prepared by this summer on the findings and conclusions together with NAEP's plans for activities designed to increase the utility of its data. While this is an important first step, a continuous and systematic effort is necessary to ascertain specific information needs in the areas of policy making and curriculum development. Therefore, we are planning to examine existing practices and procedures at various levels of government (Federal, State, and local) in which assessment, research or survey data are used in the decision making process:

1. to identify information needs related to educational decision making at various levels, with particular emphasis at the federal level
2. to identify information and other needs for curriculum development and improvement

The purpose of such an analysis would be to probe in depth the ways in which specific information is actually used at various levels of decision making; to identify specific data that are needed for certain selected kinds of decision making; and to determine the most effective ways of establishing and sustaining dialogue with different user groups. Such an effort would quicken the pace of NAEP's progress toward providing decision- and curriculum-relevant data and extend the usefulness of present data.

GAO RECOMMENDATION

The Secretary require project management to:

Continue and increase newly initiated efforts to interpret project data so as to reduce the heavy reliance on others for data interpretation.

DEPARTMENT COMMENTS

We concur. Although we recognize that interpretive reporting by NAEP may pose problems in terms of access to certain population subgroups or institutions, NAEP plans to continue and extend its efforts in this area. During the last year, NAEP has published the first two interpretive reports ever prepared by its staff. Previous policy, which caused NAEP to refrain from interpretation of its data, was based upon concerns associated with accessibility to various populations and NAEP's ability to retain enough expertise to analyze the implications of all the assessment areas. In addition, the various groups that participated in the early exploration concerning the feasibility of a National Assessment, expressly objected to any possibility for analyzing or reporting any type of State or local school system level comparisons.

As NAEP obtains data on additional background variables, there will be more opportunities for data analysis and interpretation, and we will continue to encourage NAEP's increased effort in this area. The constraint we envision in the future is primarily based upon NAEP's inability to retain sufficient numbers of experts to permit NAEP to interpret all of its findings. Thus NCES would intend to encourage others (researchers, etc.) to continue to examine and report on NAEP data from a variety of perspectives in addition to strengthening its present analysis capability.

GAO RECOMMENDATION

The Secretary require project management to:

Provide for comparison of its test results with performance standards by giving greater emphasis to developing the procedures needed to compare those results to generally acceptable non-Federal standards.

DEPARTMENT COMMENTS

So far NAEP's approach to this problem has been to use national or

regional performance results as a "standard" for comparisons among various groups and to provide baseline measures for comparisons over time. In addition, since the NAEP sample is not large enough to provide direct estimates at the State level or below, NAEP plans to construct "derived estimates" for States, cities, districts and schools by relating certain measured demographic characteristics to achievement levels. These estimates can serve as "standards" for those who use NAEP materials at the State or local level and desire an external criterion against which their results can be compared. This approach will continue to yield useful information until valid State or local level standards can be developed. In the meantime we will explore this problem, including the procedures and technical considerations associated with achieving comparisons with other standards, more extensively with NAEP staff. We will encourage efforts to provide the technical and methodological guidance needed for policy makers at various levels to make their own comparisons or judgments about appropriate standards.

G RECOMMENDATION

The Secretary require project management to:

Improve its communication and cooperation with the National Institute of Education and other educational researchers to facilitate possible research, interpretation, and applications of project results.

DEPARTMENT COMMENTS

We concur. NCES will give more attention to both formal and informal relationships with the National Institute of Education (NIE) and other Federal agencies. Through the Assistant Secretary for Education's office, it will be possible to establish and maintain certain formal communication networks, since the Commissioner of Education, the Director of NIE, and the Administrator of NCES meet regularly with the Assistant Secretary for Education. Other meetings and communication devices will be developed as well.

As NAEP becomes a richer source of data on input as well as output measures, individual researchers and organizations will increasingly be interested in the analysis and interpretation of NAEP data. One small effort which will commence this summer is the visiting scholars program funded by the National Science Foundation (NSF). This grant will permit NAEP to have up to four faculty research personnel spend this summer at NAEP.

1. to complete a background variables data collection strategy
2. to conduct a study of the relationship of Career and Occupational Development achievement data to background factors
3. to conduct a research study to develop composite sampling errors
4. to conduct an index of basic skills study

In addition, five or six Federal agencies are presently exploring NAEP materials and capabilities for possible use in their program development or evaluation efforts.

To encourage further secondary analysis of NAEP data it may be necessary to set aside some funds for the support of solicited or unsolicited analysis and interpretation of NAEP data. NCES will explore various options pertaining to this question, but recognizes the limited funding possibilities presently confronting the agency. The current regional meetings, especially one involving federal decision makers and another involving professional associations, will be useful in determining how communication and cooperation could be improved with researchers and research-sponsoring agencies as well as policy and decision makers.

With respect to the position taken by a major test publisher that project results were not relevant to curriculum objectives and "too far removed from the classroom level to be of use," this observation could easily qualify as an opinion but hardly represents an incontrovertible fact. For instance, a series of articles in the Mathematics Teacher and the Arithmetic Teacher, (professional journals addressed to teachers) discussing the implications of assessment results for curriculum and instruction would seem to belie that point as a generalization at least. Clearly more effort must be expended in apprising teachers and curriculum specialists of NAEP's findings but we do not agree that this should be taken to mean that they are not or cannot be useful at that level.

GAO RECOMMENDATION

The Secretary require project management to:

Improve dissemination of project results.

APPENDIX III

APPENDIX III

DEPARTMENT COMMENTS

We concur that improvement is needed in terms of the distribution of NAEP reports. As the report points out, NAEP reports are sold through the Government Printing Office (GPO), and NAEP and NCES have minimal control over the distribution of reports. We will continue to seek GPO cooperation on this matter, and will explore the possibility of the distribution of the reports and other publications directly by NAEP as one means of improving the dissemination of NAEP results.

In addition to special studies and reports, NAEP is examining the feasibility of preparing special bulletins or news releases indicating assessment results at national or regional levels and related information. In this way, targeted reports to State boards of education, legislators and the like can be related to local or area level considerations that may prompt further application of NAEP results to educational planning and decisionmaking.

GAO RECOMMENDATION

The Secretary urge project management to:

Continue developing and refining objective-referenced tests - tests which give results for a group in terms of pre-determined educational objectives.

DEPARTMENT COMMENTS

We concur. NAEP will continue to develop and refine the procedures for these activities. Several research studies, for which NAEP is seeking outside funding, could significantly strengthen NAEP's contribution in this area -- objective and criterion-referenced testing.

GAO RECOMMENDATION

The Secretary urge project management to:

Increase its technical assistance to local educational agencies regarding its concepts, materials, and methods where possible within the available funding.

DEPARTMENT COMMENTS

We concur and will attempt to increase technical assistance to LEA's within available funding.

GAO RECOMMENDATION

The Secretary urge project management to:

Increase its efforts to serve Federal agencies and others by providing special studies for those who need and may be willing to finance them. The project should pursue this approach by more adequately informing potential users of its capabilities in this area.

DEPARTMENT COMMENTS

We concur. NCES will encourage NAEP to increase its efforts to provide special studies for various agencies and organizations. In addition, NCES and NAEP will expand their efforts to inform government agencies concerning NAEP methods, materials and findings and attempt to address specific data needs of the various agencies. Special conferences, staff involvement in reviews of draft NAEP reports and similar activities should increase the awareness and involvement of other agencies in the potential application of NAEP results to their data needs.

**Education Commission of the States**

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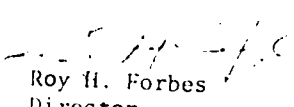
April 27, 1976

Mr. Gregory J. Ahart, Director
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Ahart:

We have received a copy of the GAO draft report to Congress on the National Assessment of Educational Progress. In compliance with your request, we have enclosed a response to the recommendations in the draft report. While we concur in general with many of the recommendations, we have added information about recent Assessment activities that might not be available to you. If any questions arise, call George Johnson at (303) 893-5200.

Sincerely,


Roy H. Forbes
Director

RHF:mr

enc.

EP

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

April 27, 1976

Response to THE NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS;
ITS RESULTS NEED TO BE MADE MORE USEFUL

The General Accounting Office correctly identifies the long-range goal of National Assessment as providing information useful to educational decision-makers and practitioners in identifying problems, setting priorities, and determining progress, and the Office justifiably criticizes the Assessment for having attained only limited success for this goal. However, the achievement of long-range goals typically requires extended periods of time. For this reason, the following interim goals, which were designed to measure progress toward the long-range goal, provide more useful criteria against which to measure the progress of the Assessment:

1. To measure change taking place in selected aspects of the educational attainment of young Americans.
2. To make available on a continuing basis comprehensive data on the educational attainments of young Americans.
3. To utilize the capabilities of the National Assessment organization to conduct special interest probes into selected areas of educational attainments.
4. To provide data, analyses, and reports understandable to, interpretable by and responsive to the needs of a variety of audiences.
5. To encourage and facilitate interpretive studies of National Assessment data, thereby generating implications useful to educational practitioners and decisionmakers.

6. To facilitate the use of National Assessment's technology at state and local levels as appropriate.
7. To continue to develop, test, and refine the technologies necessary for gathering and analyzing National Assessment achievement data.
8. To conduct an ongoing program of research and operational study necessary for the resolution of problems and refinement of the National Assessment model.

Although there were certainly problems, the Assessment has attained a level of success in each of these interim goals. The long-range goal, providing information useful to educational decisionmakers and practitioners, is one which perhaps can best be evaluated after several more years after the Assessment has fulfilled its function of identifying changes that occur over time.

Even though the goal of providing useful information for decisionmakers and practitioners is long-term, the Assessment has made substantial progress toward this goal.

[See GAO note, p. 70.]

The Assessment has produced reports directly relevant to policymaking. The report on male-female differences in achievement, the report on racial composition of schools and academic achievement, the proposed report on Spanish-surnamed Americans, and the proposed basic skills report are all designed to address policy relevant questions. In addition, Assessment data are a primary source

of information for The Condition of Education, an annual report by the National Center for Education Statistics for the Congress. More policy relevant reports should be generated as the Assessment continues to generate change data; educational trend data, as educational indicators, might well be increasingly relevant to policy decisions.

While the GAO report quotes a representative from a major test publisher as stating Assessment data are "too far removed from the classroom to be of any use," the Assessment has on file letters from teachers who have used Assessment data in the classroom. A series of surveys indicate that the overwhelming majority of superintendents and principals who had access to Assessment reports stated that the data were applicable to specific curriculum issues and usable in the classroom; the respondents then listed uses in both areas. A four-man committee from the National Council of Teachers of Mathematics found important implications of Assessment data for mathematics education. They published articles based on the data in both The Arithmetic Teacher and Mathematics Teacher; in addition, The Arithmetic Teacher is currently devoting its "Using Research in Teaching" section to detail results of several exercises from the National Assessment mathematics report. While Assessment data are presently not used to their full potential -- perhaps in part because most education practitioners are not aware of the project -- they are capable of being used. But we have to make potential users aware that the data exist and encourage their use.

The General Accounting Office made the following recommendations to make the project more useful to educational decision makers, researchers, and practitioners:

1. *That National Assessment be redirected by (a) identifying the informational and other needs of decision makers, (b) determining the feasibility and cost effectiveness of alternate approaches for*

selecting and reporting educational assessment data and providing other services to satisfy those needs, and (c) deciding on the assessment approach to be used. We concur. We have, in fact, already begun to identify these information needs of decisionmakers and to evaluate alternative approaches for presenting Assessment data. An Office of Application has been created to identify assessment-related information requirements of federal, state, and local education decisionmakers. One of the first tasks of this office has been to conduct a series of eight future-focus conferences designed to provide input for the planning process. Teachers, local and state administrators, members of national educational organizations, government officials, and university researchers have all been assembled to discuss what kinds of data would be most valuable to them: Should the Assessment continue with its subject-matter orientation or should it assess basic skills? Should it assess by both age and grade? Should it provide state-level data, either by giving states an opportunity to conduct simultaneous assessments or by deriving a statistical estimate of the data? In addition, the Assessment is presently discussing a grant proposal with a foundation to study how research and survey data can be used by decisionmakers; the study would include an examination of how economic, agricultural, and medical data have been utilized to determine whether a parallel pattern of utilization can be designed to education data. We assume that this approach is an appropriate response to the recommendation, which reinforced rather than criticizes our present efforts.

2. *That the project establish continuing dialogues with the Congress, executive agencies and state and local policymakers to determine their needs for data and how the National Assessment capabilities*

can best be used to meet those needs. We concur. Several recent Assessment reports have been released in Washington, D.C., and meetings have been scheduled with key Congressional leaders in an attempt to establish continuing dialogues with the Congress. The Office of Application and especially the future-focus conferences, both examined in the preceding paragraph, are examples of some work that has already been accomplished in determining and meeting the needs of local, state, and national policymakers.

3. *That National Assessment continue to initiate efforts to interpret project data in order to reduce the heavy reliance on others for data interpretation. We concur. Preliminary efforts in this area include A Perspective on the First Music Assessment, An Assessment of Attitudes Toward Music, Writing Mechanics, 1969-1974, and Science Achievement: Racial and Regional Trends, 1969-1973, all of which examined the implications of the data. The positive reception of these reports has encouraged the Assessment to continue its efforts to interpret as well as report the data. In addition, Assessment personnel and experts in other fields examine the implications of the data for teachers, curriculum developers, administrators, and policymakers for their presentations to national conferences and professional meetings.*
4. *That the project provide for comparison of its test results with performance standards by either (a) developing its own standards against which project test results can be compared to judge performance or (b) giving greater emphasis to developing the procedures needed to compare its test results by other meaningful standards. We concur. Some exploratory work has been attempted in this area, but*

the problem of finding acceptable standards remains. National Assessment and the National Council for the Social Studies jointly published an article in which desired levels of performance were contrasted with actual levels of performance, but we were not satisfied with the method. The Assessment has submitted a grant proposal to a foundation to establish the feasibility of contrasting actual performance with pre-established standards, but the proposal has not yet been accepted. Serious steps remain in the area of establishing standards for objective-referenced testing. National standards may be meaningless and politically unacceptable, while local standards require effort at a local level. The Assessment is attempting to develop and disseminate a methodology with which state and local education agencies can establish their own standards.

5. *That National Assessment improve its communication and cooperation with the National Institute of Education and other educational researchers to facilitate the possible research, interpretation, and application of project results.* We concur. Attempts to establish a working relationship with the National Institute of Education have included inviting Institute representatives to National Assessment briefings, offers to exchange information and meetings between directors. The Assessment now works closely with several Institute contractors and will continue to work toward establishing lines of communication with the Institute. In addition, the National Science Foundation is working jointly with the Assessment to fund four summer research fellows to examine technical problems of assessment methodology. The Assessment is also negotiating a grant proposal with a foundation to fund validity studies for objective-

referenced tests by researchers from Iowa State University, the University of Indiana, the University of Colorado, and the National Assessment. In addition, the Assessment is negotiating with research groups planning to examine some of the unanalyzed data from the second writing assessment and to perform secondary analysis on data previously reported. These ventures are clearly only initial efforts in establishing working relationships with various educational researchers, and National Assessment recognizes the need to continue these efforts.

6. *That the project improve dissemination of its results.* We concur. Again, some progress has been made in this area, but we are planning for more. Each year, Assessment personnel present 40 to 50 papers at national conferences and professional meetings. Our newsletter circulation, for example, grows by 500 names per month, now totalling 28,000 readers. During the first quarter of 1976, 10,445 publications, including reports, reprints, objectives booklets, monographs, informal reports, brochures, and Update on Education were distributed. Perhaps most impressive, however, has been the media coverage of the reports. The report of male-female differences in performance, for example, was reported in over 700 newspapers with a total readership of 57.5 million; reports on reading and writing have been publicized in Time, Newsweek, U.S. News & World, Readers Digest, and on NBC, CBS, and ABC. In an editorial on the second writing assessment, the Washington Post maintained, "One sign of real hope for public education is the very fact that the Assessment exists."

In addition to the six recommendations designed to increase the usefulness of National Assessment to educational decisionmakers, researchers, and

practitioners, the GAO made three more general recommendations to better utilize the project's capabilities:

1. *That National Assessment continue to develop and refine objective-referenced tests.* We concur. Present work in this area includes (a) attempts to refine the technology by insuring more representative coverage for the science and mathematics assessments and (b) feasibility studies to solve problems about how to measure difficult learning areas like speaking and listening skills or problem-solving skills.
2. *That National Assessment increase its technical assistance to local education agencies.* We concur, if resources are available. As the GAO has pointed out, National Assessment has given the bulk of its technical assistance to state education agencies; however, little additional assistance could be supported through reallocating existing funds. Providing greater assistance to local agencies would require additional funding, possibly from an alternative source. Whatever the funding situation, National Assessment is presently in the process of creating more definitive documents to make it easier for local education agencies to use Assessment materials. In addition, we are exploring the possibility of providing states with statistically derived estimates, based on regional and demographic characteristics, of statewide performance on Assessment items. One way of responding to the need of local education agencies would be to work with state agencies so that they, in turn, provide technical assistance to local education agencies.
3. *That the project increase its efforts to serve federal agencies and others by providing special studies for those who need and may be*

willing to finance them. We agree that the project should pursue this approach by more adequately informing potential users of its capabilities in this area. Ongoing and proposed special studies include those financed or partially financed by Right to Read, which has recently requested a proposal for a third replication of their reading study, the Bureau of Health Education, which has expressed interest in partially funding an assessment of health education, and the Department of Defense, which has expressed interest in funding a study of overseas dependent schools. Special studies that have been provided to other agencies include special analyses for the Assistant Secretary of Education, the Department of Health, Education and Welfare, and a study of minority skills for the National Advisory Committee for Equal Employment Opportunity. However, we firmly agree that efforts in this area should be expanded.

National Assessment has contributed to American education by advancing assessment technology and assisting state education agencies in applying assessment technology. However, as the General Accounting Office has pointed out, assessment results have not been as extensively utilized by educational decisionmakers, researchers, and practitioners as we would like them to be. National Assessment has sometimes been successful in providing useful information for educational decisionmaking, but, in general, we agree that concentrated effort needs to occur in this area.

GAO note: Deleted comments pertain to material presented in the draft report which has not been included in the final report.

PRINCIPAL HEW OFFICIALS
RESPONSIBLE FOR THE ACTIVITIES
DISCUSSED IN THIS REPORT

	<u>Tenure of office</u>	
	<u>From</u>	<u>To</u>
SECRETARY OF HEALTH, EDUCATION, AND WELFARE:		
David Mathews	Aug. 1975	Present
Caspar W. Weinberger	Feb. 1973	Aug. 1975
Frank C. Carlucci (acting)	Jan. 1973	Feb. 1973
Elliot L. Richardson	June 1970	Jan. 1973
Robert H. Finch	Jan. 1969	June 1970
ASSISTANT SECRETARY (EDUCATION):		
Virginia Y. Trotter	June 1974	Present
Charles B. Saunders, Jr. (acting)	Nov. 1973	June 1974
Sidney P. Marland, Jr.	Nov. 1972	Nov. 1973
COMMISSIONER OF EDUCATION:		
Terrel H. Bell	June 1974	Present
John R. Ottina	Aug. 1973	June 1974
John R. Ottina (acting)	Nov. 1972	Aug. 1973
Sidney P. Marland, Jr.	Dec. 1970	Nov. 1972
Terrel H. Bell (acting)	June 1970	Dec. 1970
James E. Allen, Jr.	May 1969	June 1970
ASSISTANT COMMISSIONER, NATIONAL CENTER FOR EDUCATIONAL STATISTICS:		
Dorothy M. Gilford	May 1968	Aug. 1974
Francis C. Nassetta	Jan. 1968	May 1968
Alexander M. Mood	Jan. 1965	Jan. 1968
ADMINISTRATOR, NATIONAL CENTER FOR EDUCATION STATISTICS (note a):		
Marie D. Eldridge	Jan. 1976	Present
Francis C. Nassetta (acting)	Dec. 1974	Jan. 1976
Dorothy M. Gilford (acting)	Aug. 1974	Dec. 1974

a/As of August 1974, the responsibility for administering activities relating to education statistics was transferred from the Office of Education to the Office of the Assistant Secretary for Education, HEW.

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